

REMARKS

In the Office Action, the Examiner withdrew all rejections raised in the previous office action and raised a new rejection against claims 5, 6, 11-13, and 19-26 as being anticipated by or obvious over Tang et al. (U.S. 6,569,662). The Examiner alleged that Tang et al. disclose a polynucleotide sequence (SEQ ID NO:8 of Tang et al.) that encodes a polypeptide that comprises a fragment of SEQ ID NO:2, 6, 8, and 10 of the present invention. The Examiner further alleged that Tang et al. disclose vectors, host cells, and methods of producing a protein as claimed. Applicants herein submit amended claims and new claims. These claims are neither anticipated by nor obvious over Tang et al.

Claim amendments:

Claims 5, 6, and 22-26 are canceled, claims 11-13 and 19 are amended, and new claims 27-31 are added. The claims as amended recite SEQ ID NO:2 and five particular fragments thereof (amino acids 27-321 of SEQ ID NO:2, amino acids 28-320 of SEQ ID NO:2, amino acids 41-227 of SEQ ID NO:2, amino acids 42-222 of SEQ ID NO:2, and amino acids 44-216 of SEQ ID NO:2) and claim polynucleotides encoding same, and the complement of each. Support for these five fragments can be found in the specification at page 6, lines 19 and 24; page 9, lines 15-17, 27, and 28; and page 19, line 12 to page 20, line 6.

As a result of the above amendments, claims 11-13, 19-21, and new 27-31 are now pending in the application.

The amended claims and the new claims are not anticipated by or obvious over Tang et al.:

SEQ ID NO:8 of Tang et al. encodes a polypeptide of 297 amino acids (the Tang polypeptide). The Tang polypeptide differs from SEQ ID NO:2 of the present invention (an anthrax toxin receptor of 368 amino acids long) in a carboxyl end portion from amino acid 268.

New claims 27-29 are directed at a polynucleotide that comprises a nucleotide sequence that encodes the full length SEQ ID NO:2 (368 amino acids), amino acids 27-321 of SEQ ID NO:2, or amino acids 28-320 of SEQ ID NO:2. Since each of the above amino acid sequences recited in claims 27-29 contains a segment (amino acid 268 to the C-terminus) that is neither disclosed nor rendered obvious by Tang et al., claims 27-29 are novel and unobvious over Tang et al.

New claims 30 and 31 are directed at a polynucleotide that consists of a nucleotide sequence that encodes amino acids 41-227 of SEQ ID NO:2, amino acids 42-222 of SEQ ID NO:2, or amino acids 44-216 of SEQ ID NO:2. Although Tang et al. disclose a full length polypeptide (coded by SEQ ID NO:8) that contains the above fragments recited in claims 30 and 31, the recited fragments *per se* are not specifically disclosed by Tang et al. Neither was there any explicit or implicit suggestion in Tang et al. that these particular fragments are useful and should be made. Therefore, claims 30 and 31 are novel and unobvious over Tang et al.

The remaining claims, claims 11-13 and 19-21, depend from claims 27 and 30. For the same reasons discussed above, dependent claims 11-13 and 19-21 are novel and unobvious over Tang et al.

In view of the claim amendments and remarks provided above, applicants respectfully request reconsideration of the merits of this patent application.

No extension of time is believed to be necessary and no fee is believed to be due in connection with this response. However, if any extension of time is required in this or any subsequent response, please consider this to be a petition for the appropriate extension and a request to charge the petition fee to the Deposit Account No. 17-0055. No other fee is believed to be due in connection with this response. However, if any fee is due in this or any subsequent response, please charge the fee to the same Deposit Account No. 17-0055.

Respectfully submitted,



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